

CLAIMS

What is claimed is:

1. A method for communicating a transaction between an originating computer and a destination computer, the method comprising the steps of
processing transaction data from an application suite at the originating computer;
generating standardized data transactions based on predefined definitions;
sending the standardized transaction data from the originating computer to the destination computer;
receiving the standardized transaction data by the destination computer;
generating transaction data based on the attributes of the destination computer and storing the transaction data at the destination computer; and,
processing the transaction data by a target application suite at the destination computer.
2. The method for communicating a transaction as in claim 1, wherein the generating transaction data step comprises converting the transaction data from its original format to a standardized format.
3. The method for communicating a transaction as in claim 2, wherein the generating transaction data step converts the data from the standardized format to a format readable by the target application suite.
4. The method for communicating a transaction as in claim 1, the generating standardized data transactions comprising creating unique encryption keys for encoding and decoding transaction data.

5. A system for communicating a transaction between an originating computer, the originating computer comprising a computer usable medium having computer readable instruction code means stored therein, and a destination computer, the destination computer comprising a computer usable medium having computer readable instruction code means stored therein, the system comprising the steps of

- computer readable instruction code means for processing transaction data from an application suite at the originating computer;
- computer readable instruction code means for generating standardized data transactions based on predefined definitions;
- computer readable instruction code means for sending the standardized transaction data from the originating computer to the destination computer;
- computer readable instruction code means for receiving the standardized transaction data by the destination computer;
- computer readable instruction code means for generating transaction data based on the attributes of the destination computer and storing the transaction data at the destination computer; and,
- computer readable instruction code means for processing the transaction data by a target application suite at the destination computer.

6. A method for exchanging data between an initiator and a responder, the steps comprising:

- sending a session request package from the initiator to the responder;
- sending a session confirm from the responder to the initiator;
- sending a key request from the initiator to the responder;
- confirming the initiator's key request has been encoded correctly by the responder;
- sending a key confirm from the responder to the initiator;
- confirming the responder's key confirm has been encoded correctly by the initiator;

sending a data package by the initiator to the responder;
 replying with a package confirm by the responder to the initiator; and,
 repeating the sending a data package step and replying step until the
 initiator sends an end request.

7 The method for exchanging data between an initiator and a responder as
in claim 6, wherein the session request package comprises the initiator's IP address and
profile data.

8 The method for exchanging data between an initiator and a responder as in claim 7, wherein the session confirm step comprises the step of generating a new session key pair having a responder's public session key.

9 The method for exchanging data between an initiator and a responder as
in claim 6, wherein the session confirm comprises:

- the session key pair;
- the responder's public session key;
- the responder's profile data.

10 The method for exchanging data between an initiator and a responder as
in claim 6, the key request comprises:

- the initiator's public session key;
- the initiator's profile data.

11. The method for exchanging data between an initiator and a responder as in claim 10, wherein the session confirm comprises the responder's public session key.

12. The method for exchanging data between an initiator and a responder as in claim 11, wherein the key request is encoded with the responder's public session key.

13. The method for exchanging data between an initiator and a responder as in claim 6, wherein the confirming the initiator's key request step comprises:

decoding the key request; and,
verifying the key request is properly formatted.

14. The method for exchanging data between an initiator and a responder as in claim 6, wherein the confirming the responder's key confirm step comprises:

decoding the key confirm, and
verifying the key confirm is properly formatted.

15. The method for exchanging data between an initiator and a responder as in claim 6, wherein the sending a data package step further comprises converting the data from its original format to a standardized format.

16. The method for exchanging data between an initiator and a responder as in claim 15, wherein the replying step further comprises converting the data from the standardized format to a format used by the responder.

17. The method for exchanging data between an initiator and a responder as in claim 15, wherein the standardized format is EDI.

18. A system for exchanging data between an initiator computer and a responder computer, the initiator computer comprising a computer usable medium having computer readable instruction code means stored therein, and the responder computer comprising a computer usable medium having computer readable instruction code means stored therein, the system comprising the steps of:

computer readable instruction code means for sending a session request package from the initiator to the responder;

computer readable instruction code means for sending a session confirm from the responder to the initiator;

computer readable instruction code means for sending a key request from the initiator to the responder;

computer readable instruction code means for confirming the initiator's key request has been encoded correctly by the responder;

computer readable instruction code means for sending a key confirm from the responder to the initiator;

computer readable instruction code means for confirming the responder's key confirm has been encoded correctly by the initiator;

computer readable instruction code means for confirming the responder's key confirm has been encoded correctly by the initiator;

computer readable instruction code means for sending a data package by the initiator to the responder;

computer readable instruction code means for replying with a package confirm by the responder to the initiator; and,

repeating the sending a data package step and replying step until the initiator sends an end request.

19. A system for exchanging data between an initiator computer and a responder computer as in claim 18, wherein the session request package comprises the initiator's IP address and profile data.

20. A system for exchanging data between an initiator computer and a responder computer as in claim 18, wherein the session confirm step further comprises computer readable instruction code means for generating a new session key pair having a responder's public session key.

21. A system for exchanging data between an initiator computer and a responder computer as in claim 20, wherein the session confirm comprises:

the session key pair;
the responder's public session key; and,
the responder's profile data.

22. A system for exchanging data between an initiator computer and a responder computer as in claim 18, the key request comprises:

the initiator's public session key; and,
the initiator's profile data.

23. A system for exchanging data between an initiator computer and a responder computer, as in claim 18, wherein the session confirm comprises the responder's public session key.

24. The method for exchanging data between an initiator and a responder as in claim 18, wherein the key request is encoded with the responder's public session key.

25. A system for exchanging data between an initiator computer and a responder computer as in claim 18, wherein the system further comprising:

computer readable instruction code means for decoding the key request;
and,
computer readable instruction code means for verifying the key request is properly formatted.

26. A system for exchanging data between an initiator computer and a responder computer as in claim 18, wherein the system further comprising:

computer readable instruction code means for decoding the key confirm;
and,

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computer readable instruction code means for verifying the key confirm is properly formatted.

27. A method for exchanging data between an initiator and a responder, the initiator steps comprising:

- sending a session request package;
- receiving a session confirm;
- sending a key request;
- receiving a key confirm;
- confirming the key confirm has been encoded correctly;
- sending a data package;
- receiving a package confirm; and,
- sending a session end request.

28 The method for exchanging data between an initiator and a responder as in claim 27, wherein the session request package comprises the initiator's IP address, and profile data.

29 The method for exchanging data between an initiator and a responder as in claim 27, wherein the session confirm step further comprises the initiator receiving a session key pair and a responder's public session key.

30 The method for exchanging data between an initiator and a responder as in claim 29, wherein the session confirm comprises:

- the session key pair;
- the responder's public session key;
- the responder's profile data.

31. The method for exchanging data between an initiator and a responder as in claim 27, the key request comprises:

- the initiator's public session key;
- the initiator's profile data.

32. The method for exchanging data between an initiator and a responder as in claim 31, wherein the session confirm further comprises the responder's public session key.

33. The method for exchanging data between an initiator and a responder as in claim 32, wherein the key request is encoded with the responder's public session key.

34. The method for exchanging data between an initiator and a responder as in claim 33, the confirming the key confirm has been encoded correctly step further comprising:

- decoding the key confirm with the responder's public session key;
- verifying the key confirm has been formatted correctly.

35. A computer usable medium having computer readable instruction code means stored therein for enabling a computer to exchange transactions with a separate computer, comprising:

- computer readable instruction code means for causing the computer to send a session request package;

- computer readable instruction code means for causing the computer to receive a session confirm;

- computer readable instruction code means for causing the computer to send a key request;

- computer readable instruction code means for causing the computer to receive a key confirm;

42. The computer usable medium as in claim 35, the computer readable instruction code means for confirming the key confirm has been encoded correctly further comprising:

computer readable instruction code means for decoding the key confirm; and
computer readable instruction code means for verifying the key confirm is properly formatted.

43. A method for exchanging data between an initiator and a responder, the responder steps comprising:

receiving a session request package;
sending a session confirm;
receiving a key request;
confirming the initiator's key request has been encoded correctly;
sending a key confirm;
receiving a data package;
replying with a package confirm; and,
repeating the receiving a data package step and replying step until receiving an end session request.

44. The method for exchanging data between an initiator and a responder as in claim 43, wherein the session request package comprises the initiator's IP address and profile data.

45. The method for exchanging data between an initiator and a responder as in claim 43, wherein the session confirm step comprises the step of generating a new session key pair having a public session key.

46. The method for exchanging data between an initiator and a responder as in claim 43, wherein the session confirm comprises:

- the session key pair;
- the public session key;
- a profile data.

47. The method for exchanging data between an initiator and a responder as in claim 43, the key request comprises:

- the initiator's public session key; and,
- the initiator's profile data.

48. The method for exchanging data between an initiator and a responder as in claim 43, wherein the session confirm further comprises the public session key.

49. The method for exchanging data between an initiator and a responder as in claim 48, wherein the key request is encoded with the public session key.

50. The method for exchanging data between an initiator and a responder as in claim 43, wherein the confirming step comprises:

- decoding the key request; and,
- verifying the key request is properly formatted.

51. A computer usable medium having computer readable instruction code means stored therein for enabling a computer to exchange transactions with a separate computer, comprising:

- computer readable instruction code means for causing the computer to receive a session request package from an initiator;

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computer readable instruction code means for causing the computer to send a session confirm;

computer readable instruction code means for causing the computer to receive a key request;

computer readable instruction code means for causing the computer to confirm the key request has been encoded correctly;

computer readable instruction code means for causing the computer to send a key confirm;

computer readable instruction code means for causing the computer to receive a data package;

computer readable instruction code means for causing the computer to reply with a package confirm; and,

computer readable instruction code means for causing the computer to receiving data packages and reply with package confirms until the computer receives an end session request.

52. The computer useable medium as in claim 51, wherein the session request package comprises the initiator's IP address and profile data.

53. The computer usable medium as in claim 51, further comprising computer readable instruction code means for causing the computer to generate a new session key pair having a public session key.

54. The computer useable medium as in claim 53, wherein the session confirm comprises:

the session key pair;

the public session key;

a profile data.

55. The computer useable medium as in claim 54, the key request comprises:
the initiator's public session key;
the initiator's profile data.
56. The computer useable medium as in claim 55, wherein the session confirm further comprises the public session key.
57. The computer useable medium as in claim 56, wherein the key request is encoded with the public session key.
58. The computer useable medium as in claim 51, wherein the confirming step comprises:
decoding the key request; and,
verifying the key request is properly formatted.
59. A system for exchanging data, comprising
- a) a third party server;
 - b) a web host server;
 - c) a commerce server having a trading partner profile table;
 - d) a first network connecting the customer computer, web host server and commerce server;
 - e) an applications server connected to the commerce server by a second network, the applications server responsive to remote procedure calls from the commerce server;
 - f) the initiator which initiates the transaction is selected from the group consisting of the application server, third party server, web host server, and web commerce server;

g) the responder which receives the transaction selected from the group consisting of the application server, third party server, web host server, and web commerce server;

h) a point to point secure transfer protocol using high level encryption, the protocol comprising:

- 1) computer readable instruction code means for accessing the trading partner profile table and determining the identity of the initiator and responder, what transactions the initiator and responder have mutually agreed to allow, determine a location and a format of data for the transaction, and determine allowable values;

- 2) computer readable instruction code means for generating a unique encryption key pair for each transaction;

- 3) computer readable instructions for converting data from the initiator to a standardized format

- 4) computer readable instructions for encrypting the data using one of the unique encryption key pair;

- 5) computer readable instruction means for sending the data to the responder;

- 6) computer readable instruction code means for decrypting the data; and,

- 7) computer readable instructions for converting data from the standardized format to the format utilized by a pre-defined format for the responder.